

Amendments to the Claims:

1 1. (currently amended) A computer Computer network for the configuration,
2 installation, monitoring, error diagnosis and/or error analysis of plural technical-physical
3 ~~processes, in particular~~ electric drive processes, which run under the control, regulation
4 and/or monitoring by plural process computer nodes (4), which are connected via at least
5 one shared communication system to at least one diagnosis computer node in which one
6 or more configuration, monitoring, diagnosis service(s) and/or function(s) are
7 implemented, which are allocated to the processes and/or the process computer nodes (4)
8 and/or to the data processing operations running therein, characterised in that the shared
9 communication system is realised by an the Ethernet or another bus or communication
10 system operating asynchronously and/or with a stochastic access method.

1 2. (currently amended) A network Network according to claim 1, characterised in
2 that a communication unit or computer node is interconnected between the Ethernet or
3 other bus or communication system and at least one of the process computer nodes (4)
4 and connects the process computer node (4) to the Ethernet or other bus or
5 communication system.

1 3. (currently amended) A network Network according to claim 2, characterised in
2 that the communication unit or communication computer node (5) is formed for enquiry-
3 based or event-based communication with the diagnosis computer node.

1 4. (currently amended) A network Network according to claim 2 or 3, characterised
2 in that the communication unit or communication computer node (5) is formed for
3 communication with the diagnosis computer node via XML protocols and/or as an XML-
4 based interface.

1 5. (currently amended) A network Network according to claim one of claims 2 to 4,
2 characterised in that the communication unit is capable of running entirely or in part on
3 the hardware of the process computer node and/or diagnosis computer node.

1 6. (currently amended) A network Network according to claim one of claims 2 to 4,
2 characterised in that the communication computer node (5) is formed as an additional
3 component for the respective process computer node (4).

1 7. (currently amended) A network Network according to claim 2 one of claims 2 to
2 5, characterised in that for each data exchange each communication unit is allocated a
3 process computer node (4) and/or a technical-physical process or each communication

4 computer node (5) is allocated at least one technical-physical process or a process
5 computer node (4).

1 8. (currently amended) A network Network according to one of claims 2 to 5 or
2 according to claim 7, characterised in that at least one of the communication computer
3 nodes (5) is connected to plural process computer nodes preferably via a serial
4 communication system.

1 9. (currently amended) A network Network according to claim one of claims 2 to 8,
2 characterised in that the communication unit or communication computer node (5) is
3 provided with functionalities for an error search or diagnosis in a the region of at least
4 one of the process computer nodes and/or technical physical processes.

1 10. (currently amended) A network Network according to claim 8 one of the
2 preceding claims, characterised in that the diagnosis computer node is formed for
3 delivering or supporting web-based operating surfaces user interfaces in particular via
4 data remote transmission or a long-distance traffic network and is provided with the
5 function components corresponding to the operating surfaces user interfaces.

1 11. (currently amended) A network Network according to claim 8 one of the preceding
2 claims, characterised by a structure corresponding to a the client/server architecture with
3 the diagnosis computer node as server.

1 12. (currently amended) Diagnosis A diagnosis computer node for a network according
2 to claim 11 and optionally 2, connected to a computer network, which utilizes a structure
3 corresponding to a client/server architecture, for configuration, installation, monitoring,
4 error diagnosis and/or analysis of plural technical-physical electric drive processes, which
5 run under control regulation and/or monitoring by plural process computer nodes (4), said
6 computer network comprising at least one communication computer node (5), wherein
7 said diagnosis computer node is formed as a server with interfaces to at least one
8 database, for communication with the communication and/or process computer nodes and
9 other client computer nodes, wherein the one or more interfaces to the other client
10 computer nodes are formed as Servlet containers, which provide transmission of
11 diagnosis data obtainable from the interfaces for communication with the communication
12 and/or process computer nodes to the client nodes, and the one or more interfaces to the
13 communications and/or process computer nodes or communication units are realised on
14 the basis of the Ethernet, characterised by a diagnosis channel, which is formed by the
15 following:

16 with one or more Ethernet interfaces allocated to the communication and/or
17 process computer node (4);

18 with an event management unit with database access, which is formed for
19 processing the diagnosis data obtained at the Ethernet interfaces; and

20 with an event monitoring unit applied on the basis of the Servlet container, which
21 makes available output data from the event management unit to one or more Applets on
22 external client computer nodes.

1 13. (currently amended) A Diagnosis computer node according to claim 12,
2 characterised in that a web server for generating and forwarding data obtained from
3 HTML pages by the Servlet container is connected downstream of the Servlet container.

1 14. (currently amended) A Diagnosis computer node according to claim 12,
2 characterised in that the interfaces are installed for communication with the
3 communication and/or process computer node via XML protocols and/or the interfaces
4 for communication with the client computer nodes via SOAP (Simple Object Process
5 Protocol).

1 15. (currently amended) A Diagnosis computer node according to claim 12 one of the
2 preceding claims, characterised by a communication unit installed by program or
3 software technology in such a manner that thereby one or more of the process computer
4 nodes (4) can be connected to the Ethernet or other bus communication system.

1 16. (currently amended) A Diagnosis computer node according to claim 12 one of the
2 ~~preceding claims~~, characterised by an appliance management unit having information
3 data via the configuration of the technical-physical processes together with associated
4 process computer nodes (4) and one or more function components, which are formed to
5 visualise the configuration in combination with the client computer node and/or for
6 keeping ready the information data for further data processing operations.

1 17. (currently amended) A communication Communication computer node (5) or
2 communication unit as a software and/or firmware module, ~~each for the network~~
3 ~~according to one of claims 1 to 11, connected to a computer network for configuration,~~
4 ~~installation, monitoring, error diagnosis and/or analysis of plural technical-physical~~
5 ~~electric drive processes, which run under control, regulation and/or monitoring by plural~~
6 ~~process computer nodes (4), which are connected via at least one shared communication~~
7 ~~system to at least one diagnosis computer node in which one or more configuration,~~
8 ~~monitoring, diagnosis services and/or functions are implemented which are allocated to~~
9 ~~the processes and/or the process computer nodes (4) and/or to the data processing~~
10 ~~operations running therein, said shared communication system being realized by an~~
11 ~~Ethernet or other bus or communication system operating asynchronously and/or with a~~
12 ~~stochastic access method characterised by the communication computer node or~~
13 ~~communication unit comprising a first interface which is allocated to the at least one~~
14 diagnosis computer node and which is programmed for communication via protocols of

15 the TCP/IP family, including UDP/IP, ~~preferably on the basis of the Ethernet~~, and by one
16 or more second interfaces allocated to one or more of the process computer nodes (4),
17 wherein the first and the one or more second interfaces may be coupled together via one
18 or more information brokers, which are each formed by program and/or circuit
19 technology as sub-units for bidirectional enquiry-based and/or event-based data
20 communication between the first and second interface(s).

1 18. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 17, characterised in that the first interface is
3 formed for communication on the basis of XML protocols.

1 19. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 17 or 18, characterised in that the second
3 interface is formed for connection to a serial communication system.

1 20. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 17 ~~one of the preceding claims~~, characterised in
3 that the one or more information brokers comprise one or more function components,
4 which are formed for error search or diagnosis in a ~~the~~ region of the process computer
5 nodes and/or technical-physical processes.

1 21. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 17 one of the preceding claims, characterised in
3 that plural information brokers are installed with different functionalities and are
4 connected to a connection manager, which is formed by program or circuit technology as
5 a sub-unit for carrying out pre-determinable priority stages, according to which a
6 specified one of the plural information brokers may be connected to the second
7 interface(s) and each have a communication requirement at the process computer node(s)
8 (4).

1 22. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 17 one of the preceding claims, characterised by a
3 software information broker for bidirectional transmission of firmware or other data or
4 complete data records from the first to the second interface(s).

1 23. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 22, characterised in that an FTP (File Transfer
3 Protocol) server is interconnected between the software information broker and the first
4 interface.

1 24. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 22 one of the preceding claims, characterised by

3 the provision of a non-volatile write/read memory, in particular flashcard memory, with
4 which one or more of the information brokers communicate.

1 25. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 22 one of the preceding claims, characterised by a
3 parameter information broker for realising an interface which is preferably XML-based
4 for the reading and/or writing of parameters in one or more allocated process computer
5 nodes (4).

1 26. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 22 one of the preceding claims, characterised by
3 an error/event information broker, which is formed for communication with an XML-
4 based protocol on the basis of TCP/IP via the first interface and is provided with a test
5 and trigger member which can be so configured from outside that if a predetermined
6 event occurs, e.g. ~~a tolerance limit is exceeded~~, in the region of the process computer
7 node(s) (4) and/or of the technical-physical process, automatically a corresponding
8 message transmission is released to the first interface.

1 27. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 22 one of the preceding claims, characterised by
3 the installation of an interpreter for the running of scripts which are formed for access to

4 function elements and/or information data in the information broker(s) for the purpose of
5 carrying out monitoring and diagnosis functions.

1 28. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 27, characterised in that the interpreter may be so
3 coupled to an FTP (File Transfer Protocol) server connected to the first interface that
4 scripts received via the first interface may be executed.

1 29. (currently amended) A Communication communication computer node (5) or
2 communication unit according to claim 27 one of the preceding claims, characterised by
3 said communication computer node or communication unit being formed as an additional
4 structural component for a respective process computer node (4) and/or structural
5 incorporation with a process computer node.

1 30. (currently amended) A Communication communication unit according to claim
2 27 according to one of the preceding claims, characterised by implementation which is at
3 least in part loadable on to the hardware of a process and/or diagnosis computer node.